**In The Claims:**

1.    (currently amended)   A method for ranking services in a web services architecture having a hierarchy of services ~~(401, 406, 408, 410)~~ with a root originating service requestor ~~(401)~~, a service of a first level in the hierarchy calling a service of a lower level, the method comprising:

   ~~the originating service requestor (401)~~ indicating a preference regarding ~~one or more services~~ <u>at least one service</u> and a ranking machine ~~(405)~~ having a choice algorithm based on the preference;

   ~~the originating service requestor (401)~~ invoking services of ~~one or more levels~~ <u>at least one level</u> of hierarchy;

   ~~at each level of the hierarchy, a service using a directory (411) to find~~ <u>finding</u> a set of possible lower-level services <u>by a service using a directory at each level of the hierarchy</u>; and

   ~~the ranking machine (405)~~ applying the choice algorithm to the set of possible lower-level services.


2.    (currently amended)   A method as claimed in claim 1, wherein the lower-level services are <u>selected from</u> service requestors or service providers.


3.    (currently amended)   A method as claimed in claim 1 ~~or claim 2, wherein the set of possible lower-level services is referred~~ <u>further comprising referring the set of possible lower-level services</u> to the ranking machine ~~(405)~~ from the directory ~~(411)~~ and <u>returning</u> a preferred sequence ~~is returned~~ by the ranking machine ~~(405)~~ to the directory.


4.    (currently amended)   A method as claimed in claim 3, wherein ~~the step of~~ referring ~~to the ranking machine (405)~~ <u>the set of possible lower-level services to the ranking machine from the directory</u> is not visible to the service using the directory ~~(411)~~.

5.      (currently amended)   A method as claimed in claim 1 ~~or claim 2, wherein the set of possible lower-level services is sent~~ further comprising sending the set of possible lower-level services by the service using the directory ~~(411)~~ to the ranking machine ~~(405)~~ and returning a preferred sequence ~~is returned~~ by the ranking machine ~~(405)~~ to the service.

6.      (currently amended)   A method as claimed in ~~any one of the preceding claims~~ claim 1, ~~wherein~~ further comprising returning a single result or a sequence of results ~~is returned~~ to the service using the directory ~~(411)~~.

7.      (currently amended)   A method as claimed in ~~any one of the preceding claims~~ claim 1, wherein lower-level invocations of services in the hierarchy are not visible to higher-level services.

8.      (currently amended)   A method as claimed ~~any one of the preceding claims~~ in claim 1, wherein the preference ~~of the originating service requestor (401) ranks~~ comprises at least one of ranking services in an order in which the originating service requestor ~~(401)~~ wishes to use the services, ~~excludes~~ excluding services from being used, and ~~/or provides~~ providing other selection influencing criteria.

9.      (currently amended)   A method as claimed in ~~any one of the preceding claims~~ in claim 1, wherein the preference ~~of the originating service requestor (401)~~ is based on quality of service criteria ~~including~~ comprising at least one cost, efficiency, speed and reliability.

10.      (currently amended)   A method as claimed in ~~any one of the preceding claims~~ in claim 1, wherein ~~where there is an originating service requestor's preference,~~ the preference overrides a selection by the service using the directory ~~(411)~~.

11.     (currently amended)   A method as claimed in ~~any one of the preceding claims~~claim 1, wherein if the preferred service is not available, a subsequent service is obtained by reference to the ~~originating service requestor's~~original preference.


12.     (currently amended)   A method as claimed in ~~any one of claims 1 to 9~~claim 1, wherein if there is no stored ~~originating service requestor's~~preference, the service using the directory ~~(411)~~ makes the selection.


13.     (currently amended)   A web services architecture comprising:

a root originating service requestor ~~(401)~~;

a hierarchy of services ~~(401, 406, 408, 410)~~ in which a service of a first level calls a service of a lower level;

a directory ~~(411)~~ for finding services in the hierarchy;

a ranking machine ~~(405)~~ ~~with means for applying~~ configured to apply a choice algorithm for services based on the originating service requestor's preference regarding one or more services;

wherein, at each level of the hierarchy, the directory ~~(411)~~ provides a set of possible services and the ranking machine ~~(405)~~ applies the choice algorithm to provide a sequence of preferred services.


14.     (currently amended)   A web services architecture as claimed in claim 13, wherein the lower-level services are <u>selected from at least</u> service requestors ~~or~~ <u>and</u> service providers.


15.     (currently amended)   A web services architecture as claimed in claim 13 ~~or claim 14~~, wherein the ranking machine ~~(405)~~ is connected to the directory ~~(411)~~ by a port ~~(412)~~ and the set of possible services is referred to the ranking machine ~~(405)~~ by the directory ~~(411)~~ and the sequence of preferred services is returned to the directory ~~(411)~~ by the ranking machine ~~(405)~~.

16.     (currently amended)   A web services architecture as claimed in ~~any one of claims~~ claims 13 ~~to 15~~, wherein a service of a first level finds a service of a lower level by means of a UDDI directory ~~(411)~~.

17.     (currently amended)   A web services architecture as claimed in claim 16, wherein the ranker machine ~~(405)~~ has a port ~~(412)~~ on the UDDI directory ~~(411)~~ and processes flows turning TModel bags into a selected set of TModels.

18.     (currently amended)   A web services architecture as claimed in claim 16 ~~or claim 17~~, wherein each UDDI operation is referred to the ranking machine ~~(405)~~ and returned as a sequence conforming with the service requestor's preference.

19.     A web services architecture as claimed in ~~any one of claims~~ claim 16 ~~to 18~~, wherein underlying UDDI application code carries out the referral and appends the location of the ranker machine ~~(405)~~ to subsequent XML flow.

20.     A computer program product for a web services architecture having a hierarchy of services ~~(401, 406, 408, 410)~~ with a root originating service requestor ~~(401)~~, a service of a first level calling a service of a lower level, <u>the computer program product comprising:</u>

<u>        a computer readable medium having computer readable program code embodied therein, the computer readable program code</u> comprising ~~computer readable program code means for performing the steps of~~:

<u>                computer readable program code configured to</u> ~~the originating service requestor (401) indicating~~ <u>indicate</u> a preference regarding ~~one or more services~~ <u>at least one service</u> and a ranking machine ~~(405)~~ having a choice algorithm based on the preference;

<u>                computer readable program code configured to</u> ~~the originating service requestor (401) invoking~~ <u>invoke</u> services of ~~one or more levels~~ <u>at least one level</u> of hierarchy;

computer readable program code configured ~~at each level of the hierarchy, a service using a directory (411)~~ to find a set of possible lower-level services <u>by a service using a directory at each level of the hierarchy</u>; and

computer readable program code configured to ~~the ranking machine (405) applying~~ <u>apply</u> the choice algorithm to the set of possible lower-level services.